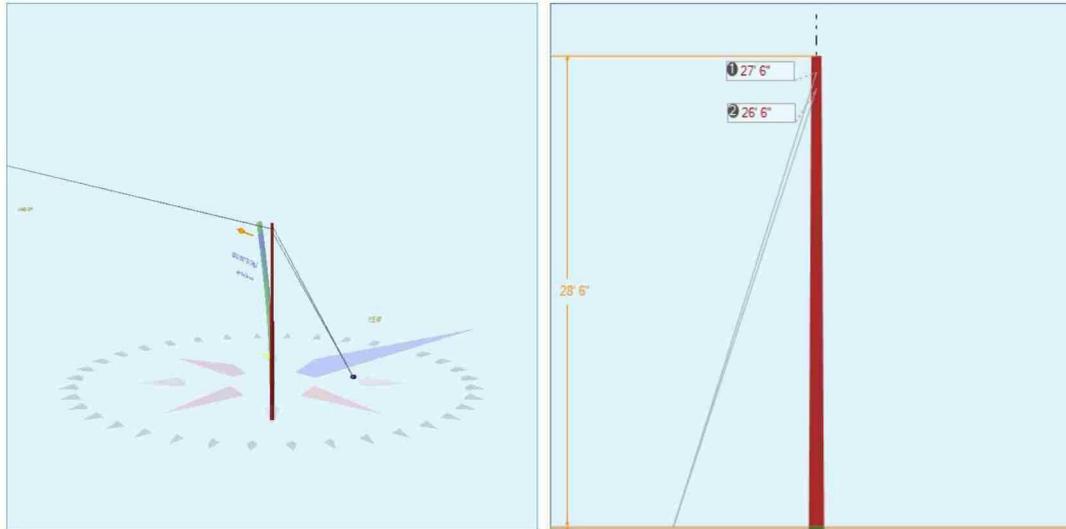




PASSED [REDACTED] 05/22/2021

| | | | | | | | |
|-------------------|---------------|-------------------------|-----------------|----------------------|-----------------------|----------------------------|---------------|
| Pole Num: | 0 | Pole Length / Class: | 35 / 5 | Code: | HFTD 2-3 Peak Wind | Structure Type: | Guyed Tangent |
| PM Order Number | 35217268 | Species: | DOUGLAS FIR | GO 95 Rule: | At Installation (New) | Pole Strength Factor: | 0.50 |
| Estimator LAN ID | [REDACTED] | Setting Depth (ft): | 6.50 | Construction Grade: | B | Transverse Wind LF: | 1.00 |
| Sketch Location | LOC_105 | G/L Circumference (in): | 28.83 | Loading District: | Heavy | Wire Tension LF: | 1.00 |
| Joint Pole Number | Unset | G/L Fiber Stress (psi): | 8,000 | Ice Thickness (in): | 0.00 | Vertical LF: | 1.00 |
| Notification | 120047659 | Allowable Stress (psi): | 4,000 | Wind Speed (mph): | 90.00 | Pole Factor of Safety: | 6.17 |
| Aux Data 6 | Unset | Fiber Stress Ht. Reduc: | No | Wind Pressure (psf): | 20.74 | Vertical Factor of Safety: | 12.35 |
| Latitude: | 39.911279 Deg | Longitude: | -121.326533 Deg | Elevation: | 1971.999936896 Feet | Bending Factor of Safety: | 6.84 |



| Pole Capacity Utilization (%) | Height (ft) | Wind Angle (deg) |
|-------------------------------|-------------|------------------|
| Maximum | 32.4 | 0.0 |
| Groundline | 32.4 | 0.0 |
| Vertical | 16.2 | 26.2 |

| Pole Moments (ft-lb) | Load Angle (deg) | Wind Angle (deg) |
|----------------------|------------------|------------------|
| Max Cap Util | 7,392 | 272.5 |
| Groundline | 7,392 | 272.5 |
| GL Allowable | 25,284 | |
| Overturn | 35,300 | |



Digitally signed

by [REDACTED]

Date: 2021.05.24

09:15:17 -07'00'

| Guy System Component Summary | | | | Load From Worst Wind Angle on Pole | | Individual Maximum Load With Overload Applied | |
|---------------------------------|------------------|------------------|-------------|------------------------------------|------------------|-----------------------------------------------|------------------|
| Description | Lead Length (ft) | Lead Angle (deg) | Height (ft) | Nominal Capacity (%) | Wind Angle (deg) | Max* Load Capacity (%) | Wind Angle (deg) |
| Anchor - 18M | 15.0 | 28.0 | | 59.5 | 291.2 | 60.9 | 210.0 |
| EHS 3/8 (Down) | | | 27.5 | 69.7 | 291.2 | 71.0 | 210.0 |
| EHS 3/8 (Down) | | | 26.5 | 69.4 | 291.2 | 71.4 | 210.0 |
| Anchor | 60.0 | 208.0 | | 44.9 | 291.2 | 44.9 | 0.0 |
| EHS 3/8 (Span/Head) | | | 27.5 | 72.9 | 291.2 | 72.9 | 0.0 |
| System Capacity Summary: | | | | Adequate | | Adequate | |

| Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 272.5° | | | | | | | | | | |
|--------------------------------------------------------------------------------|-------------------|------------------|------------------------|--------------------|-------------------|--------------------------|---------------------|-----------------------|--------------------|-------------------|
| | Shear Load* (lbs) | Applied Load (%) | Bending Moment (ft-lb) | Applied Moment (%) | Pole Capacity (%) | Bending Stress (+/- psi) | Vertical Load (lbs) | Vertical Stress (psi) | Total Stress (psi) | Pole Capacity (%) |
| GuyBraces | 155 | 30.4 | 3,732 | 50.5 | 14.8 | 852 | 7,909 | 120 | 971 | 24.3 |
| Pole | 355 | 69.6 | 3,660 | 49.5 | 14.5 | 835 | 548 | 8 | 843 | 21.1 |
| Pole Load | 510 | 100.0 | 7,392 | 100.0 | 29.2 | 1,686 | 8,457 | 128 | 1,814 | 45.4 |
| Pole Reserve Capacity | | | 17,892 | | 70.8 | 2,314 | | | 2,186 | 54.6 |

| Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 272.5° | | | | | | | | | | |
|------------------------------------------------------------------------------|-------------------|------------------|------------------------|--------------------|-------------------|--------------------------|---------------------|-----------------------|--------------------|-------------------|
| | Shear Load* (lbs) | Applied Load (%) | Bending Moment (ft-lb) | Applied Moment (%) | Pole Capacity (%) | Bending Stress (+/- psi) | Vertical Load (lbs) | Vertical Stress (psi) | Total Stress (psi) | Pole Capacity (%) |
| PG&E | 155 | 30.4 | 3,732 | 50.5 | 14.8 | 852 | 7,909 | 120 | 971 | 24.3 |
| Pole | 355 | 69.6 | 3,660 | 49.5 | 14.5 | 835 | 548 | 8 | 843 | 21.1 |
| Totals: | 510 | 100.0 | 7,392 | 100.0 | 29.2 | 1,686 | 8,457 | 128 | 1,814 | 45.4 |

| Guy Wire and Brace | | Owner | Attach Height (ft) | End Height (ft) | Lead/Span Length (ft) | Wire Diameter (in) | Percent Solid (%) | Lead Angle (deg) | Incline Angle (deg) | Wire Weight (lbs/ft) | Rest Length (ft) | Stretch Length (in) |
|--------------------|-----------|-------|--------------------|-----------------|-----------------------|--------------------|-------------------|------------------|---------------------|----------------------|------------------|---------------------|
| EHS 3/8 | Down | PG&E | 27.50 | 0.00 | 15.00 | 0.375 | 75.00 | 28.0 | 61.2 | 0.273 | 36.56 | 1.24 |
| EHS 3/8 | Down | PG&E | 26.50 | 0.00 | 15.00 | 0.375 | 75.00 | 28.0 | 60.3 | 0.273 | 35.64 | 1.20 |
| EHS 3/8 | Span/Head | PG&E | 27.50 | 44.33 | 60.00 | 0.375 | 75.00 | 208.0 | -15.6 | 0.273 | 60.13 | 2.13 |

| Guy Wire and Brace (Loads and Reactions) | | Elastic Modulus (psi) | Rated Tensile Strength (lbs) | Guy Strength Factor | Allowable Tension (lbs) | Initial Tension (lbs) | Loaded Tension* ² (lbs) | Maximum Tension ² (lbs) | Applied Tension ³ (lbs) | Vertical Load (lbs) | Shear Load In Guy Dir (lbs) | Shear Load At Report Angle (lbs) | Moment at GL ³ (ft-lb) |
|------------------------------------------|-----------|-----------------------|------------------------------|---------------------|-------------------------|-----------------------|------------------------------------|------------------------------------|------------------------------------|---------------------|-----------------------------|----------------------------------|-----------------------------------|
| EHS 3/8 | Down | 2.30e+7 | 15,400 | 0.50 | 7,700 | 700 | 5,467 | 5,467 | 5,369 | 4,704 | 2,587 | -1,115 | -29,780 |
| EHS 3/8 | Down | 2.30e+7 | 15,400 | 0.50 | 7,700 | 700 | 5,500 | 5,500 | 5,347 | 4,644 | 2,650 | -1,142 | -29,415 |
| EHS 3/8 | Span/Head | 2.30e+7 | 15,400 | 0.50 | 7,700 | 700 | 5,616 | 5,616 | 5,616 | -1,514 | 5,408 | 2,331 | 64,577 |
| Totals: | | | | | | | | | | 7,834 | 10,646 | 73 | 5,383 |

| Anchor/Rod Load Summary | Owner | Rod Length AGL (in) | Lead Length (ft) | Lead Angle (deg) | Strength of Assembly (lbs) | Anchor/Rod Strength Factor | Allowable Load (lbs) | Max Load ² (lbs) | Load at Pole MCU ³ (lbs) | Max Required Capacity ² (%) |
|-------------------------|-------|---------------------|------------------|------------------|----------------------------|----------------------------|----------------------|-----------------------------|-------------------------------------|----------------------------------------|
| Anchor - 18M | PG&E | 6.00 | 15.00 | 28.0 | 36,000 | 0.50 | 18,000 | 10,967 | 10,716 | 60.9 |
| Anchor | PG&E | 6.00 | 60.00 | 208.0 | 25,000 | 0.50 | 12,500 | 5,616 | 5,616 | 44.9 |

| Pole Buckling | | | | | | | | | | | | | |
|-------------------|------------------------------|------------------------------------------------|--------------------------------|--------------------------------------|----------------------|---------------------|-----------------------------|--------------------|-------------------|----------------------|----------------------------------------|---------------------------------------|--------------------------------|
| Buckling Constant | Buckling Column Height* (ft) | Buckling Section Height (% Buckling Col. Hgt.) | Buckling Section Diameter (in) | Minimum Buckling Diameter at GL (in) | Diameter at Tip (in) | Diameter at GL (in) | Modulus of Elasticity (psi) | Pole Density (pcf) | Ice Density (pcf) | Pole Tip Height (ft) | Buckling Load Capacity at Height (lbs) | Buckling Load Applied at Height (lbs) | Buckling Load Factor of Safety |
| 0.71 | 26.21 | 34.70 | 8.18 | 5.82 | 6.05 | 9.18 | 2.38e+6 | 60.00 | 57.00 | 28.50 | 52,106 | 522.06 | 6.17 |